

# Uponor

## PEX 20 UNDERFLOOR HEATING

### UP36 Controller & UNiset MIDI/MAXI

The pre-assembled UNiset, together with the UP36 electronic controller, are designed to control both water temperature and flow rates in secondary underfloor heating circuits. These products are fully compatible with all Uponor's single and multi-zone, wired and radio, control systems.

#### UP36 Controller and Outside Sensor



#### UP36

The UP36 controller is specifically designed for use in commercial and larger domestic underfloor heated properties. The unit has a floating action output to modulate the position of a mixing valve, which in turn controls the water temperature supplied to the underfloor heating system. The unit can be configured for either simple set-point control or energy efficient weather compensation. Product code: UP36

#### Set-point temperature control

The UP36 is supplied set up, as standard, for fixed water temperature set-point control, with a 45°C factory default setting. A timeswitch connection can be used to programme times for water temperature setback during unoccupied periods. The installer/user can view and adjust settings via the LCD display.

#### Weather Compensation

The UP36 can easily be configured for weather compensation and is supplied complete with the necessary sensors to enable this option.

#### UP36 Sensors

The unit is supplied with outside sensor and pipe strap-on sensor (x2). The indoor room sensor, necessary for certain applications, is an optional extra.

Indoor Sensor (Product Code: OJ076)

#### Exercising and Test Functions

The built-in exercise function is programmed to operate the mixing valve and UFH circulating pump during periods of inactivity, to minimize the possibility of pump or valve seizure. In addition, the unit has a push button for testing the correct sequence of control operation and, if detected, will display on screen error messages.

#### Unoccupied Setback Capability

The UP36 has two modes of temperature setback; water temperature setback or room temperature setback.

#### Water temperature setback

During unoccupied periods, as programmed via an external timeswitch wired to the UP36, the unit can be set to control the UFH water at a lower temperature. This will automatically provide a lower level of heat during the unoccupied periods.

#### Room temperature setback

This setback mode is only available when the UP36 is set and installed for weather compensation, and the optional indoor sensor is fitted. During unoccupied periods, as programmed via an external timeswitch wired to the UP36, the unit can be set to control the indoor temperature, at the location of the indoor sensor, to a setting lower than the temperature set for the occupied periods.



#### UNiset MIDI/MAXI

The UNiset MIDI/MAXI are fully pre-assembled packages, specifically designed for ease and speed of installation.

	UNiset MIDI	UNiset MAXI
Product Code	UPON250	UPON400
Max. Dimensions	350h adj x 400w x 150d (mm)	365 adj x 460w x 175d (mm)
Weight	7.75kg	9.55kg
Circulating Pump	Grundfos UPS25-60	Grundfos UPS25-55
3-port Valve	Rotary shoe, kvs=6.3	Rotary shoe, kvs=10
*Valve Actuator	ESBE 66M 3-point motor c/w auxiliary switch & manual override facility	
**Primary connection	1" BSP female ball valve (flow & return connection). Standard unit supplied for Left Hand primary connection.	
Electrical Supply	230 Volt / Single Phase / 50 Hertz	

\*Not supplied in UNiset package, order separately

\*\*Right Hand MIDI or MAXI sets are available to special order

### UNiset MIDI/MAXI Pack Contents

- Grundfos circulating pump
- Telescopic return pipe for variable manifold centres
- 1" isolating ball valve
- Brass interconnecting pipework
- Mounting brackets with rubber lined pipe clips
- 1" brass coupling set for connection to UFH manifold
- Manifold bracket spacer set
- 3-port rotary shoe valve

Supplied separately:

66M valve actuator (Product Code: Z66M00)

### Unassembled Option

If on-site fabrication is preferred, Uponor can supply valves loose for site assembly of control sets – 5 sizes of valve bodies available in 3-port or 4-port variants.

### Installation

For installation information refer to separate 'Uponor UNiset MINI, MIDI, MAXI Installation Instructions' leaflet.

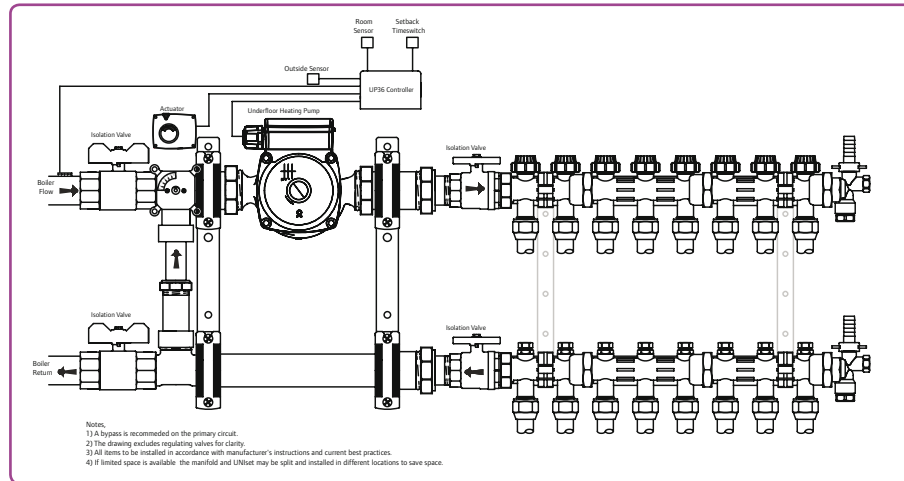
### Set Selection Guide for Uponor Ø20 x 2mm pipe, m<sup>2</sup>

	Output (W/m <sup>2</sup> )				
	100	70	50		
	Maximum Loop Length (m)				
	80	100	100	120	120
	Maximum Floor Area (m <sup>2</sup> )				
Midi Set	165	115	240	190	350
Maxi Set	320	230	470	380	680

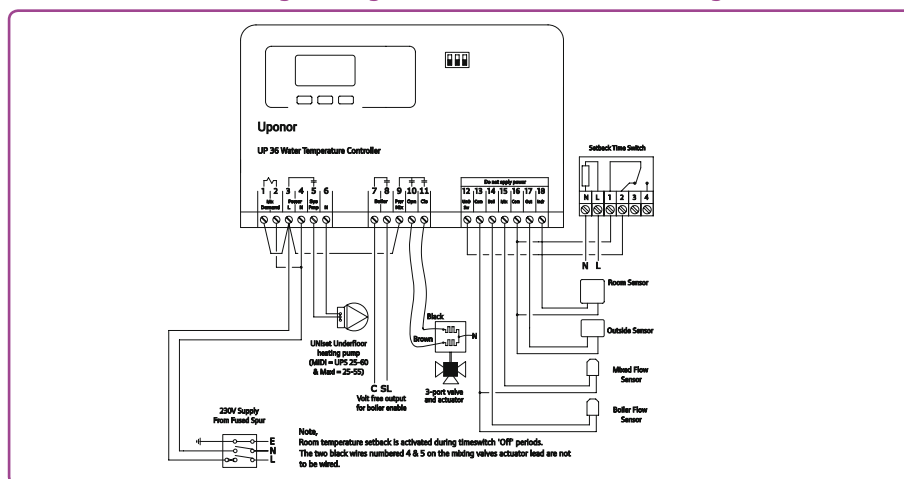
Note: Areas based on pipe laid at 300mm c/c, dT of 7.5°C and local manifold mixing.

### Typical Drawings

#### Mechanical arrangement drawing showing UNiset MIDI with WGF manifold and single zone control



#### Electrical schematic drawing showing UNiset MIDI/MAXI wired for single zone control



All wiring must comply with I.E.E. Regulations

Contact our technical department for specific mechanical and wiring schematic drawings or for other technical information.

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